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(71) Applicant (for all designated States except US): **BIOSEN-
SOR APPLICATIONS SWEDEN AB** (publ) [SE/SE];
Ursviksvägen 131A, S-174 46 Sundbyberg (SE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **MÅNSSON, Per**
[SE/SE]; Solängsvägen 76, S-192 54 Sollentuna (SE).
ANDERSSON, Henrik [SE/SE]; Tulegatan 70, S-172
72 Sundbyberg (SE). **SMITH, Jan** [SE/SE]; Ringvägen

88, S-118 60 Stockholm (SE). **JENSEN, Kjeld** [DK/SE];
Skogsängsvägen 13, S-141 43 Huddinge (SE). **AASTRUP,
Teodor** [SE/SE]; Grubbensringen 33, S-112 69 Stockholm
(SE).

(74) Agents: **ZACCO SWEDEN AB** et al.; P.O. Box 23101,
Sveavägen 170, S-104 35 Stockholm (SE).

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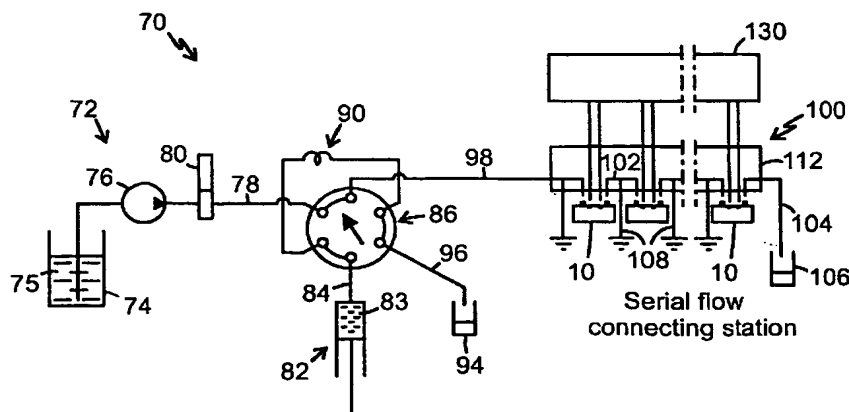
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(54) Title: SYSTEM, DEVICE AND METHOD FOR DETECTION OF SEVERAL INDIVIDUAL ANALYTES IN A SOLUTION, AND A DISPOSABLE FLOW CELL FOR USE THEREIN



(57) **Abstract:** A system, device and method for detection of several individual analytes in a test solution aliquot (83) with an array of individually operated piezoelectric crystal microbalances are described. The system comprises a connecting station (100) that receives a plurality of individually specific piezoelectric crystal microbalance flow-trough cells (10), each containing a piezoelectric crystal (50) carrying electrodes (56,62) and a coating (66,46) exposing a first member of an interaction pair specific for an individual analyte being a second member of the interaction pair. Flowing means (70) flows a solution (75) and the test solution aliquot (83) to and through a cell compartment of each of the cells (10) via the connecting station (100). Power and measurement means (130) oscillate the piezoelectric crystal(s) (50). A change in oscillating characteristics of the crystal(s) (50), following interaction between the first and second members of the interaction pair, detects presence of the individual analyte(s). Further, disposable flow cells (10) for use in an array of individually operated piezoelectric crystal microbalances (112) is described.



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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Y		24,26-34
A		6-8,10-14,25
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X	US 6196059 B1 (C.KÖSSLINGER ET AL), 1 March 2001 (01.03.01), column 8, line 49 - line 55; column 6, line 17 - line 28	22-23
Y		24,26-34
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A	US 5494639 A (A.GRZEGORZEWSKI), 27 February 1996 (27.02.96), abstract	1-34
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☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

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Box 5055, S-102 42 STOCKHOLM

Facsimile No. +46 8 666 02 86

Authorized officer

Mats Raidla /itw

Telephone No. +46 8 782 25 00

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Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5945774 A (MING-CHANG CHIH ET AL), 31 August 1999 (31.08.99), abstract --	1-34
A	US 5977687 A (GLENN M.TOM ET AL), 2 November 1999 (02.11.99), abstract -- -----	1-34

INTERNATIONAL SEARCH REPORT
Information on patent family members

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